

Appl. No. 10/045,578
Amdt. Dated April 4, 2007
Reply to Office Action of February 23, 2007

Attorney Docket No. 81747.0212
Customer No.: 26021

REMARKS

This application has been carefully reviewed in light of the Office Action dated February 23, 2007. Claims 1-18 remain in this application. Claims 1, 8 and 16 are the independent Claims. Reconsideration of the application are respectfully requested.

Art-Based Rejections

Claims 1, 7-8 and 14 were rejected under 35 U.S.C. § 103(a) over “OLE for Retail POS – Application Programmer’s Guide” (Epson) in view of U.S. Patent Pub. No. 2001/0029534 (Spinks) and in further view of U.S. Patent No. 5,712,629 (Curtis); Claims 2-6, 9-13, and 15-18 were rejected under §103(a) over Epson in view of Spinks and further in view of U.S. Patent No. 5,712,629 (Curtis) and U.S. Patent No. 6,741,558 B1 (Gresham). Applicant respectfully traverses the rejections and submits that the claims herein are patentable in light of the arguments below.

The Epson Reference

The Epson reference (OLE for Retail POS – Application Programmer’s Guide) provides guidance to application developers and hardware providers relating to OPOS controls. The OPOS control has a Service Object that passes information to a Control Object by reporting events. (*See, Epson, page 11*). The Service Object reports a status change data that indicates a change in device status. Epson refers to this function as StatusUpdateEvent, which reports a change in the device’s status. (*See, Epson, page 22*).

The Spinks Reference

Spinks et al. is directed to methods and apparatus for physically locating and tracking devices connected to a network from a central point using the network cable infrastructure to which the devices connect. (*See, Spinks, para. 3*)

The Curtis References

Curtis is directed to device for enhancing the capability of point of sale (POS) systems. The present invention includes an interface device 12 that is coupled between the communication line of a point of sale terminal 14 and its corresponding store controller 16 for enabling the system to attach to and operate with an external peripheral unit such as an electronic fund transfer unit 18. Most of the time, data transferred between POS terminal 14 and controller 16 is uninterrupted by interface device 12 and is unaffected by its presence. Once this specific data pattern is detected, interface device 12 activates circuitry to interrupt the flow of data between terminal 14 and controller 16, and to enable device 12 to send data to and receive data from both terminal 14 and controller 16. Additionally, interface device 12 controls the flow of data to and from EFT unit 18 through connector 32. In this manner, device 12 functions as an interface for allowing an external peripheral unit, such as EFT unit 18, to attach to and operate with terminal 14 and store controller 16. (*See, Curtis, col. 2, lines 7-13; col. 3, lines, 23-39; Fig. 1*)

The Gresham Reference

Gresham is directed to an event detector that detects a plurality of different possible asynchronous events from any of a plurality of source addresses and nodes, debounces the event and, once a valid event has been identified and confirmed, formats and transmits a message via a message transport system to a

predetermined destination address for further appropriate action. Each event is time-stamped so that latency in the message transport system does not affect time-critical events. Thus, the transmitted message identifies the source address, source node, an event number for identifying the event, and a time-stamp associated with the event. (*See, Gresham, Col. 1, lines 45-56*).

The Claims are Patentable Over the Cited References

The present application is generally directed to a device status monitoring system and method for a data processing system.

As defined by independent Claim 1, a device status monitoring system in a data processing system includes a peripheral device connected to a host computer. The host computer runs an operating system and an application capable of controlling the peripheral device. The host computer includes a device control system for controlling the peripheral device through the operating system. The device control system includes a first object providing a device class interface to the application and a second object providing an interface for the peripheral device to the first object. The device status monitoring system includes a status change data recording unit in the second object for continuously recording status change data indicating each sequential change in a device status to a status change recording unit. A recording condition input unit for selecting the data to be record by defining one or more recording conditions is provided.

The applied references do not disclose or suggest the above features of the present invention as defined by independent Claim 1. In particular, the applied references do not disclose or suggest a device status monitoring system with “a status change data recording unit ... and a recording condition input unit for

selecting the data to be record by defining one or more recording conditions”, as required by independent Claim 1.

It is an aspect of the present invention that a device status monitoring system can allow a system user or an application developer to know about problems with a device, even when the status display is hidden or does not exist. An object of the present invention is to provide a device status monitoring system, and monitoring method, to continuously record status change data (indicating a change in the status of a device in a POS terminal system) to a status change recording unit, based on specified recording conditions. A device status monitoring system, according to the present invention, can have a status change data recording unit, for sequentially recording status change data indicating a change in a particular device status, to a status change recording unit. A device status monitoring system in accordance with the present invention, however, does not affect the operation of device 420 that is being monitored; as depicted by the unidirectional arrow connecting the device 420 (which is the device being monitored) to the receiving unit 402 (which comprises a device status monitoring system in accordance with the present invention). (*See, Specification, p. 3, lines 7-17, p. 12, lines 21-24; Fig. 4*)

Applicant respectfully submits the purpose of a status change data recording unit, in accordance with the present invention, is to continuously record status change data. One of ordinary skill in the art would recognize that the purpose of a recording unit is in general to record information without affecting the source of the information. As such, any recording conditions that are defined by a recording condition input unit, in accordance with the present invention, cannot be said to otherwise affect the device being monitored.

Curtis affects the source system (device)

As discussed above, Curtis is specifically directed towards an interface device 12 that upon detection of a specifically defined terminal key press (condition) alters the operation of a POS system in order to allow the POS system to interface with an external peripheral unit 18, by altering the flow of data between terminal 12 and controller 16.

The interface device 12 of Curtis cannot be said to teach or suggest "a recording condition input unit for selecting the data to be record by defining one or more recording conditions," as required by Claim 1. A device that waits for a specifically defined terminal key event (which is assumed to represent a recording condition) to occur in order to change the operation of a system, upon the occurrence of that event, cannot be said to teach or suggest a recording condition input unit that is used to select the data to be recorded by defining one more recording conditions.

As discussed herein, the ancillary Epson, Gresham and Spinks cannot be said to remedy the deficiency of Curtis.

Curtis also teaches away from the combination

Further still, Curtis teaches away from being combined with Epson, Spinks and Gresham. If the cited references were to be altered as disclosed by Curtis, as set forth by the Office Action, the resultant device status monitoring system would make Curtis inoperable for its intended purpose. As discussed above, Curtis discloses that the occurrence of the specific terminal key event would necessarily have to affect the operation of the device being monitored; this is a fundamental teaching of Curtis. If this were to be changed, Curtis would then cease to function for its intended purpose of attaching an external peripheral unit to a POS system and allowing it to communicate with that system. Claim 1, requires "a status

change data recording unit”; as discussed above, a recording unit inherently cannot be said to affect the device that is being monitored. Thus, the references teach away from the proposed combination.

Since the cited reference fails to disclose, teach or suggest the above features recited in amended independent Claim 1, those references cannot be said to anticipate nor render obvious the invention which is the subject matter of that claim.

Accordingly, amended independent Claim 1 is believed to be in condition for allowance, and such allowance is respectfully requested.

Applicant respectfully suggests that independent Claim 8 and 16 are allowable for at least the same reasons as discussed above with regard to independent Claim 1, and such allowance is respectfully requested.

The remaining claims depend either directly or indirectly from independent Claims 1, 8 and 16 and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references and are therefore also believed to be in condition for allowance, and such allowance is respectfully requested.

Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los

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Angeles, California telephone number (310) 785-4721 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,
HOGAN & HARTSON L.L.P.

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